

ABSTRACT

In one half portion of one surface of a substrate there are formed in parallel V-grooves of the same depth, in which optical fibers are disposed and positioned with their axes held at a height H_1 with respect to the surface. The optical fibers have lens portions formed integrally therewith at one end, and the end faces of the lens portions are tilted at an angle θ' from their axes. A beam splitter is mounted on the substrate on a center line between elongations of the optical fibers, and light emitted from the lens portion propagates through space and is launched in focused form into the beam splitter, and a portion of the incident light is reflected, which propagates space and is launched in focused form into the lens portion and propagates through the optical fiber. The light having passed through the beam splitter is launched into a light receiving element. By monitoring an electrical signal that is output from the light receiving element, it is possible to monitor the light propagating through the optical fiber.